

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 84-83

NPDES NO. CA0028771

WASTE DISCHARGE REQUIREMENTS FOR:

JONES CHEMICALS, INC.
MILPITAS, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereafter called the Board) finds that:

1. Jones Chemicals, Inc. (hereafter called the discharger) by application dated July 13, 1984 has applied for issuance of waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).
2. The discharger operates a facility at 985 Montague Expressway in Milpitas, Santa Clara County. The discharger receives chlorine gas, sulfur dioxide, anhydrous ammonia, various acids and bases and trichlorethane by rail or tank truck and repackages these chemicals into cylinders or drums. The discharger also manufactures sodium hypochlorite and aqua-ammonia and ships these chemicals in tank trucks or drums.
3. Waste waters generated by a drum rinsing operation are neutralized and discharged to the municipal sanitary sewer system. Sanitary wastes also are discharged to the sewer system.
4. Studies by the discharger show that groundwaters beneath the site and beyond the site boundaries have been contaminated by organic solvents such as tri-chloroethylene (TCE), 1,1,1-tri-chloroethane (TCA), and perchloroethylene (PCE). The apparent cause of said contamination was an explosion of a solvent tank that resulted in discharge of as much as 4000 gallons of organic solvents to the ground and to adjacent Berryessa Creek.
5. By letter dated May 9, 1984, the discharger proposed to extract contaminated groundwater and treat by gravity settling, sand filtration, air-stripping, and carbon adsorption so as to achieve effluent concentrations of less than 10 ppb of tri-chloroethylene, 1,1,1-tri-chloroethane, and perchloroethylene. The proposed point of discharge was Berryessa Creek, a tributary of Coyote Creek, Coyote River, and South San Francisco Bay.
6. By letter dated June 8, 1984, the Executive Officer, in order to expedite ground water cleanup, informed the discharger that if the discharger chose to begin discharging treated groundwater pursuant to the proposal described in Finding 4 above without first obtaining an NPDES permit, he would not recommend that the Board institute enforcement action.

7. The discharge has been discharging to Berryessa Creek at a rate varying between 5,000 and 20,000 gallons per day of waste at contaminant concentrations below the effluent limitations of this permit.
8. The Board adopted a revised Water Quality Control Plan, San Francisco Bay Basin (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for Coyote Creek and South San Francisco Bay and discharge prohibitions.
9. The beneficial uses of Coyote Creek and South San Francisco Bay are:
 - . Non-contact water recreation
 - . Wildlife habitat
 - . Preservation of rare and endangered species
 - . Estuarine habitat
 - . Warm fresh water and cold fresh water habitat
 - . Fish spawning and migration
 - . Industrial service supply
 - . Shellfishing
 - . Navigation
 - . Open commercial and sport fishing
10. The Basin Plan prohibits discharge of wastewater which has "particular characteristics of concern to beneficial uses" (a) "at any point in San Francisco Bay south of the Dumbarton Bridge" and (b) "at any point where the wastewater does not receive a minimum initial dilution of at least 10:1 or into any nontidal water, deadend slough, similar confined water, or any immediate tributary thereof."
11. The Basin Plan allows for exceptions to the prohibitions referred to in Finding 10 above when it can be demonstrated that a net environmental benefit can be derived as a result of the discharge.
12. Exceptions to the prohibitions referred to in Finding 10 are warranted because the discharge is an integral part of a program to cleanup contaminated groundwater and thereby produce an environmental benefit, and because receiving water concentrations are expected to be below levels that would effect beneficial uses.
13. The Basin Plan prohibits discharge of "all conservative toxic and deleterious substances, above those levels which can be achieved by a program acceptable to the Board, to waters of the Basin." The discharger's groundwater extraction and treatment system and associated operation, maintenance, and monitoring plan constitutes an acceptable control program for minimizing the discharge of toxicants to waters of the State.
14. Effluent limitations of this Order are based on the Basin Plan, State Plans and policies, and best engineering judgment.
15. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

16. The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
17. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. The discharge of waste containing constituents in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>30-day Average</u>	<u>Daily Maximum</u>
trichloroethylene	mg/l	.010	.015
1,1,1-trichloroethane	mg/l	.010	.015
perchloroethylene	mg/l	.010	.015

2. The ph of the discharge shall not exceed 8.5 nor be less than 6.5.
3. In any representative set of samples, the discharge of Waste 001 shall meet the following limit of quality:

TOXICITY:

The survival of test fishes in 96 hour bioassays of the effluent as discharged shall be a median of 90% survival and a 90 percentile value of not less than 70 percent survival.

B. Receiving Water Limitations

1. The discharge of wastes shall not cause the following conditions to exist in waters of the State at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

- e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
 - a. Dissolved oxygen: 5.0 mg/l minimum. The median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
 - b. pH: The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units.
 - c. Un-ionized ammonia (as N):

0.025 mg/l	Annual Median,
0.4 mg/l	Maximum at any time.
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

C. Provisions

1. The discharger shall comply with all sections of this order immediately upon adoption.
2. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.
3. This Order includes all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977 except A.5, A.12, B.2, B.5., and C.2.
4. This Order expires on November 21, 1989 and the discharger must

file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

5. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing provided the Regional Administrator, U.S. Environmental Protection Agency, has no objections.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 21, 1984.

ROGER B. JAMES
Executive Officer

Attachments:

Standard Provisions, Reporting
Requirements and Definitions dated April 1977
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

Jones Chemicals, Inc.
Milpitas, Santa Clara County

NPDES NO. CA 0028771

ORDER NO. 84-83

CONSISTS OF

PART A, dated January 1978

AND

PART B

PART B

I. Description of sampling stations

A. Influent

Station	Description
A-1	At any point in the collection/treatment system prior to treatment

B. Effluent

E-1	At any point the discharge following treatment
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C. Receiving Water

C-1	At a point in Berryessa Creek 1000 feet downstream of the point of discharge
C-R	At a point in Berryessa Creek 200 feet upstream from the point of discharge

II. Schedule of Sampling and Analysis

Sampling Station	A-1	E-1	C
TYPE OF SAMPLE	Grab	Grab	Grab
flow		D (4)	
trichloroethylene	W	W	M
1,1,1-trichloroethane	W	W	M
perchloroethylene	W	W	M
pH	M (3)	M (3)	M (3)
toxicity		(1)	
ammonia	(2)	(2)	

(1) Toxicity shall be determined on a single sample taken within 30 days of issuance of this monitoring program.

(2) Ammonia concentration shall be determined on a single sample taken within 30 days of issuance of this monitoring program.

(3) pH monitoring may be discontinued after 3 months if monitoring indicates that violations of permit pH requirements has not occurred and is not likely to occur.

(4) Flow from each extraction well shall be reported.

III. Modification of Part A, dated January 1978

- A. This monitoring program does not include following sections of Part A, unless required above: C.3, C.4, C.5, D.1,D.2,D.3.b.D.3.c,D.4,E, F.3.b,F.3.d.,F.3.e,F.3.f,F.3.g
- B. Written reports shall be filed on a monthly basis by the 30th day of the month following the month in which samples were collected.
- C. Results shall be reported in a format similar to those of Table I of Appendix A, page 4 of Appendix B, Table 4 of Appendix D
- D. Laboratory results shall include indication of analytical method used and detection limit.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

- 1. Has been developed in accordance with the procedures set forth in this Regional Boards's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 84-83
- 2. Is effective on the date indicated below.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

Roger B. James
Executive Officer

Effective Date _____